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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/622,973

Filing Date: July 18, 2003

Appellant(s): ZILLIG ET AL.

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Matthew B. McNutt  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 7/2/2007 appealing from the Office action mailed 11/28/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

US 2002/0042962 A1	WILLMAN et al.	04-2002
EP 1 238 621 A1	TRUONG et al.	09-2002
EP 0 829 222 A1	REITERER et al.	03-1998
EP 0 822 093 A2	TANAKA et al.	02-1998

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

A. Claims 1-10, 17-24, 47 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Willman et al. (US 2002/0042962).

Willman et al. teach a cleaning wipe comprising a fiber web having opposing faces, which is impregnated with pressure sensitive adhesives (PSA) such as polyacrylates [0107] and block copolymers [0123]. The Examiner takes the position that the tacky material is present at the working surface and at a level greater in the intermediate region than at the working surface as the application means for the adhesive preferably applies at least a substantial amount of the additive at points on the sheet that are "inside" the sheet structure. Since the material is impregnated and the volume of the interior of a sheet is greater than the exterior surface, it is only logical that the level of tacky material is necessarily greater in the intermediate region than the level at the surface. It is an especial advantage of the three dimensional structures and/or multiple basis weights, that the amount of additive that is in contact with the skin and/or surface to be treated, and/or the package, is limited, so that materials that would otherwise cause damage, or interfere with the function of the other surface, can only cause limited, or no, adverse effects. The

presence of the additive inside the structure is very beneficial in that soil that adheres inside the structure is much less likely to be removed by subsequent wiping action [0178]. The applied publication does not specifically state regions within the fibrous article however the applied article meets the instantly claimed limitations of claims 3-10. The fibrous wipe may contain one or more layers [0241] may be either woven or nonwoven [0053] and made of polyester or polypropylene fibers [0072]. Examiner takes the position that the tacky material (i.e. PSA) coats individual fibers as the article may be a nonwoven that is impregnated with said tacky material. Claim 49 is rejected as the “intermediate region” of the applied art may be divided into any number of portions which define approximately one-third thickness of the fiber web.

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

B. Claims 12-14 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Willman et al. (US 2002/0042962).

Although Willman et al. do not explicitly teach the claimed feature of exhibiting a Drag Value of not greater than 2 pounds, it is reasonable to presume that said property is inherent to Willman et al. Support for said presumption is found in the use of like materials (i.e. [PSA impregnated fibrous web with a greater concentration of adhesive in the interior]). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205

USPQ 594. In addition, the presently claimed property of exhibiting a Drag Value of not greater than 2 pounds would obviously have been present one the Willman et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

***Claim Rejections - 35 USC § 103***

C. Claims 1-10, 17-24, 47 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiterer et al. (EP 0 829 222) in view of Willman et al. (US 2002/0042962).

i. Reiterer et al. teach the creation of tack pads comprising nonwoven fabrics impregnated with PSA (Abstract). The nonwoven web may comprise polyester and polypropylene fibers (col. 1, lines 50-57). Reiterer et al. is silent as to having higher concentrations of adhesive in the interior of the tack pad, having different properties at its two opposing faces, the claimed Drag Values and claimed PSA levels.

ii. Willman et al. teach a cleaning wipe comprising a fiber web having opposing faces, which is impregnated with pressure sensitive adhesives (PSA) such as polyacrylates [0107] and block copolymers [0123]. The Examiner takes the position that the tacky material is present at the working surface and at a level greater in the intermediate region than at the working surface as the application means for the adhesive preferably applies at least a substantial amount of the additive at points on the sheet that are "inside" the sheet structure. It is an especial advantage of the three dimensional structures and/or multiple basis weights, that the amount of additive that is in contact with the skin and/or surface to be treated, and/or the package, is limited, so that materials that would otherwise cause damage, or interfere with the function of the other surface,

can only cause limited, or no, adverse effects. The presence of the additive inside the structure is very beneficial in that soil that adheres inside the structure is much less likely to be removed by subsequent wiping action [0178]. The applied publication does not specifically state regions within the fibrous article however the applied article meets the instantly claimed limitations of claims 3-10. The fibrous wipe may contain one or more layers [0241] may be either woven or nonwoven [0053] and made of polyester or polypropylene fibers [0072]. Examiner takes the position that the tacky material (i.e. PSA) coats individual fibers as the article may be a nonwoven that is impregnated with said tacky material.

iii. Since Reiterer et al. and Willman et al. are all from the same field of endeavor (i.e. fibrous cleaning sheets) the purpose disclosed by Willman et al. would have been recognized in the pertinent art of Reiterer et al.

iv. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the tack rag of Reiterer et al. with the multiple layers, impregnant and impregnant distribution of Willman et al. because it is an especial advantage of the three dimensional structures and/or multiple basis weights, that the amount of additive that is in contact with the skin and/or surface to be treated, and/or the package, is limited, so that materials that would otherwise cause damage, or interfere with the function of the other surface, can only cause limited, or no, adverse effects. The presence of the additive inside the structure is very beneficial in that soil that adheres inside the structure is much less likely to be removed by subsequent wiping action [0178, Willman et al.].

v. Claim 49 is rejected as the “intermediate region” may be of the applied art may be divided into any number of portions which define approximately one-third thickness of the fiber web.

D. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiterer et al. (EP 0 829 222) in view of Willman et al. (US 2002/0042962) as applied to claim 1 above, and further in view of Truong et al. (EP 1 238 621).

i. Truong et al. disclose a double-sided cleaning implement comprising a reversible cleaning pad including first and second sides of cleaning web material (Abstract) each having different cleaning materials [0014]. The first and second layers are made of a cleaning web material such as a woven cloth web comprising microfibers, preferably microfibers of polyester and nylon [0039]. The cleaning pad may be composed of three or more layers, wherein the first and second layers form the outer layer [0029]. The cleaning pad of Truong et al. has drag values ranging from 1.25 to 3.33 N (0.28 to 0.75lb<sub>f</sub>) [0058].

ii. Since Reiterer et al. and Truong et al. are all from the same field of endeavor (i.e. fibrous cleaning sheets) the purpose disclosed by Truong et al. would have been recognized in the pertinent art of Reiterer et al.

iii. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the tack rag of Reiterer et al. with the different cleaning material surfaces and drag values of Truong et al. motivated by the desire to clean dry, damp and wet surfaces as well as scour other surfaces [0014, Truong et al.].

E. Claims 15, 16, 25-36, 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiterer et al. (EP 0 829 222) in view of Willman et al. (US 2002/0042962) and Truong et al. (EP 1 238 621) as applied to claim 13 above, and further in view of and Tanaka et al. (EP 0822093).

i. Tanaka et al. disclose a cleaning sheet, which comprises a substrate, a pressure-sensitive adhesive (PSA) layer formed on one or both sides of the substrate, and a porous screen disposed on the PSA layer (Abstract). Example 1 of the applied application utilizes a PSA consisting of 2-ethylhexyl acrylate, acrylic acid, and ethyl acetate at a thickness of 30 microns (col. 9, lines 40-48). Using the rule of mixtures the density of the PSA is 0.89695 g/cc, which provides a basis weight of the PSA layer of 26.9 g/m<sup>2</sup> (calculation done by Examiner).

$$0.89695 \text{ g/cc} = 896,950 \text{ g/m}^3 \text{ (density conversion)}$$

$$896,950 \text{ g/m}^3 * 30 * 10^{-6} \text{ m (thickness)} = 26.9 \text{ g/m}^2 \text{ basis weight of PSA layer}$$

ii. Since Reiterer et al. and Tanaka et al. are all from the same field of endeavor (i.e. fibrous cleaning sheets) the purpose disclosed by Tanaka et al. would have been recognized in the pertinent art of Reiterer et al.

iii. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the tack rag of Reiterer et al. with the PSA levels of Tanaka et al. motivated by the desire to provide a PSA cleaning sheet with which cleaning can be easily and smoothly conducted highly efficiently while satisfactorily preventing adhesive transfer (col. 3, lines 9-12, Tanaka et al.).

***Response to Arguments***

A. Appellant's arguments filed in the Appeal Brief dated 7/2/2007 have been fully considered but they are not persuasive.

B. Appellant argues that Willman is limited to the application of polymeric adhesive to the exterior of a completed fiber cleaning sheet (fiber web), followed by the adhesive's penetration into the interior of said sheet. Appellant continues by alleging that this method of making the cleaning sheet fails to result in the claimed article with tacky material at greater levels in its intermediate region than at its working surface. In addition to the interpretation of Willman's disclosure offered *supra*, Examiner contends that the cleaning sheet of Willman behaves in much the same manner as a sponge when water is introduced. The absorbent article (fiber web) soaks up the available fluid (in Willman's case adhesive), and the body of the article provides greater volume due to its thickness in which to absorb the fluid than its surfaces; a sponge retains much more water in its body than is present at its working surfaces. This is consistent with Appellant's measure of coating levels as set forth in paragraph 25 of the application's PG Pub, which states that the coating "level" can be in reference to a mass, volume, surface area, quantity, and/or thickness. This results in the claimed impregnated web with fluid (tacky material) present at the working surface and a level of the fluid is greater in the intermediate region than at the working surface.

C. Appellant asserts that Examiner's interpretation of Willman is flawed and the teaching that a "substantial amount" of adhesive is applied at points on the sheet that are inside the sheet structure does not support the conclusion that Willman reads on the claimed structure. As

addressed in the preceding paragraph and in the rejection *supra*, Willman teaches the impregnation of the article with adhesive, which would result in the claimed structure.

D. Appellant argues that the reliance upon Willman's use of impregnation to get the adhesive to the interior of the article does not result in the claimed invention because the adhesive must necessarily travel from the exterior surfaces of the web into the interior of the web. As set forth in Paragraph B of this section, Examiner contends that the cleaning sheet of Willman behaves in much the same manner as a sponge when water is introduced. The absorbent article sucks up the available fluid (in Willman's case adhesive), and the body of the article provides greater volume due to its thickness in which to absorb the fluid than its surfaces. This results in the claimed impregnated web with fluid (tacky material) present at the working surface and a level of the fluid is greater in the intermediate region than at the working surface.

E. Appellant argues that the fact that the interior adhesive in Willman is used to trap or retain particles in no way infers that the adhesive level must be greater at the interior than at the exterior face. Examiner agrees that the fact that the interior adhesive in Willman is used to trap or retain particles does not necessarily infer that the adhesive level must be greater at the interior than at the exterior face and has offered a clear basis for Examiner's interpretation of Willman and why he feels that it anticipates the claimed invention in the rejection section of this Answer as well as in Paragraph B of this section.

F. Appellant argues that in order to modify Reiterer in view of Willman, the teachings of Willman as a whole must be considered. Appellant contends that Willman teaches away from tacky material levels set forth in claims 15 and 16. Examiner has considered Willman as a whole and considers Willman's teaching of adhesive levels that are typically "of no greater than 10.0

gsm" [0165] to be suggestive as to a level of adhesive, but certainly does not preclude higher adhesive levels. In response to Appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, Tanaka has been relied upon to teach the adhesive levels claims 15, 16 and 25-28.

G. Appellant argues that Truong is limited to either a microfiber web alone or a web with abrasive particles, and is not employed to retain contaminants during cleaning as set forth in Reiterer and Willman. As such, the Drag Values disclosed by Truong have no bearing on the cleaning wipes in Reiterer and Willman and Truong never teaches that appropriate Drag Values permit effective cleaning while not adversely affecting the user or the surface being cleaned. As clearly laid out in Willman an appropriate amount of drag must be determined to balance an adhesive article's effectiveness against its ability to glide across a surface [0008]. Therefore, one of ordinary skill in the art would necessarily look to the mop cleaning art to find Drag Values that allow for effective cleaning while not exhausting the user [0004, Truong].

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Matthew D Matzek/  
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